

Notice of Allowability

Application No.

10/679,156

Examiner

Matthew O. Savage

Applicant(s)

GRENNING, FREDERICK H.

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 7-14-06.
2. ☒ The allowed claim(s) is/are 20 and 21 renumbered 1-2, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Matthew O Savage
Primary Examiner
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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael D. Gerhardt on 9-21-06.

Claims 1, 5, 9-13, 17, and 19 have been canceled.

20. (new) A device for dechlorinating water comprising:

a flow tube surrounding a central axis and defining an inlet coupling at one end and an outlet opening at the other end, said inlet coupling being adapted to be connected to a fluid flow system;

an outlet tube extending from an exterior to an interior of the flow tube, wherein a central axis of said outlet tube is angled at approximately 45 degrees to the central axis of the flow tube in a direction toward the inlet coupling, said outlet tube having an outlet end disposed within the interior of the flow tube that is perpendicular to the central axis of the flow tube and faces the inlet coupling;

an inlet tube extending from the exterior to the interior of the flow tube, wherein a central axis of the inlet tube is angled at approximately 45 degrees to a central axis of the flow tube in a direction toward the outlet end of the flow tube, said inlet tube having

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an inlet end disposed within the interior of the flow tube that is perpendicular to the central axis of the flow tube and faces the outlet opening of the flow tube;

an injection rate control valve disposed on said inlet tube for controlling flow through said inlet tube;

a dechlorinating agent reservoir containing a quantity of a dechlorinating agent, said reservoir including an untreated water inlet and a treated water outlet;

a first reservoir tube for connecting the outlet tube to the untreated water inlet of the reservoir; and

a second reservoir tube for connecting the treated water outlet of the reservoir to the inlet tube.

21. (new) A method of dechlorinating water comprising the steps of:

providing the device of claim 20;

coupling the inlet coupling to the fluid flow system;

flowing chlorinated water into the inlet coupling, through the flow tube, and out of the outlet opening;

diverting a portion of the chlorinated water into the inlet of the dechlorinating agent reservoir via the inlet tube and first reservoir tube;

mixing said portion with the dechlorinating agent;

returning said portion to the flow tube via the second reservoir tube and inlet tube to dechlorinate the flow of chlorinated fluid flowing through said flow tube; and

adjusting a flow rate through the inlet tube with said injection rate control valve.

On line 22 of page 14 of the specification, --with their central axes—has been inserted after “positioned”.

On line 23 of page 14 of the specification, --and a central axis of the flow tube—has bee inserted after “flow”.

On line 24 of page 14 of the specification, --and the inlet coupling 120—has been inserted after “flow”.

On line 1 of claim 15 of the specification, --or toward the outlet opening 116—has been inserted after “flow”.

On line 10 of page 15 of the specification, “201” has been changed to –201a— and “207” has been changed to --207a--;

On line 12 of page 15 of the specification, “202” has been changed to –202a— and “206” has been changed to –206--;

On line 13 of page 15 of the specification, “300” has been changed to –300a--;

On line 14 of page 15, “310” has been changed to –310a-- and “320” has been changed to –320a--;

On line 15, of page 15 of the specification, “330” has been changed to –320a--.

On line 2 of page 16 of the specification, “210” has been changed to –210a--;

On line 3 of page 16 of the specification, “affi9xed” has been changed to – affixed--.

The following is an examiner’s statement of reasons for allowance: the prior art fails to teach or suggest the combination of an outlet tube extending from an exterior to

an interior of the flow tube, wherein a central axis of said outlet tube is angled at approximately 45 degrees to the central axis of the flow tube in a direction toward the inlet coupling, the outlet tube having an outlet end disposed within the interior of the flow tube that is perpendicular to the central axis of the flow tube and faces the inlet coupling, an inlet tube extending from the exterior to the interior of the flow tube, wherein a central axis of the inlet tube is angled at approximately 45 degrees to a central axis of the flow tube in a direction toward the outlet end of the flow tube, the inlet tube having an inlet end disposed within the interior of the flow tube that is perpendicular to the central axis of the flow tube and faces the outlet opening of the flow tube, and an injection rate control valve disposed on said inlet tube for controlling flow through said inlet tube as recited in claim 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. Savage
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